otherwise. This entire issue of separations between communication cables is more about limiting damage to cables, than addressing concerns for worker or public safety.

Entergy Is Not Complying With Its Own Standards

64. Despite the significant misgivings I have about a number of assertions that Entergy has made in connection with this dispute, I would not be surprised if Entergy's basic standards for overhead line construction were good and reasonable. I am quite familiar with standards like these, and I have seen excerpts of Entergy's that are attached to some agreements. But I have not seen a complete set.

65. Pole owners including EAI usually (and should) have standards which first assure compliance with all applicable NESC rules.

66. The NESC is not a specifications manual or a design standard, nor should it be. Company specific manuals specify many details including materials to be used such as wood, steel or concrete poles, fiberglass, wood or steel crossarms, porcelain or polymer insulators and thousands of other details which are options in the NESC so long as the materials meet basic code requirements. The NESC details what is to be accomplished with respect to safety.

67. Manuals do not include every combination of facility which eventually gets installed on a pole. Manuals specify the spacing to be used on relatively clean poles by the use of drawings with dimensions. No manual

attempts to require the shortest pole, for example, that would meet the NESC requirements of what is placed on the pole initially. Good practice is to place tall enough poles to allow for addition of electric facilities and communications facilities over a period of years.

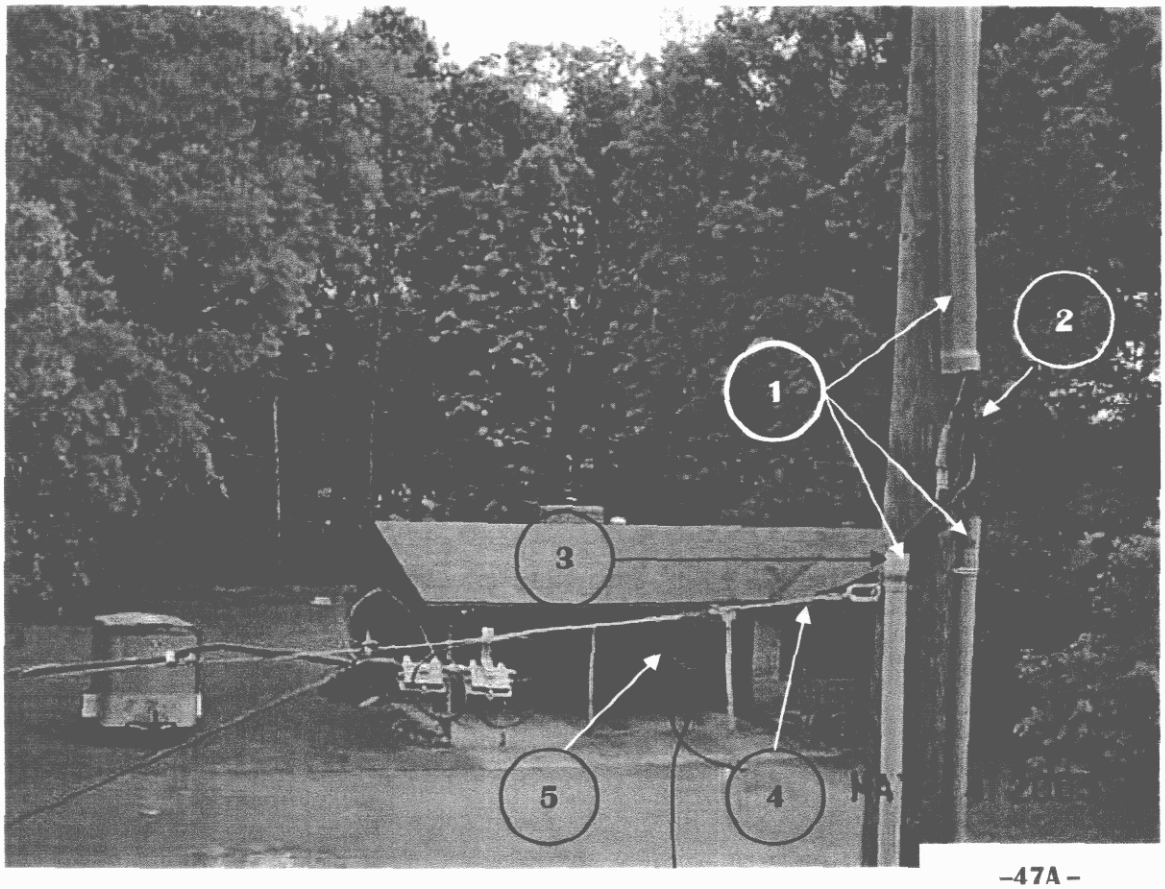
68. As long as the pole owner complies initially with the NESC and its own standards, the communications attachers can and should comply with owner standards and the NESC. As the pole fills up over time with additional facilities, the NESC and common sense come into play. Neither owner nor attacher should keep adding facilities to a pole until it violates the NESC, but it is inefficient , not necessary for safety and financially irresponsible to replace a pole if the existing pole complies with the NESC.

69. Over the last several months I am aware that certain Arkansas operators have requested EAI to provide a complete copy of its design and construction standards. While Entergy agreed to provide them, they did not ultimately do so. This is a problem for a number of reasons.

70. First, it is impossible to engineer, build and maintain facilities in compliance with Entergy's standards if the attaching parties do not know what those standards are. This has been a particularly acute problem because the ultimate arbiter on these standards has not proven to be EAI, but its contractor USS. As others discuss, it is not unusual for an EAI representative like Brad Welch to agree to one set of engineering solutions and for a cable operator to make plans to comply with that, only to be

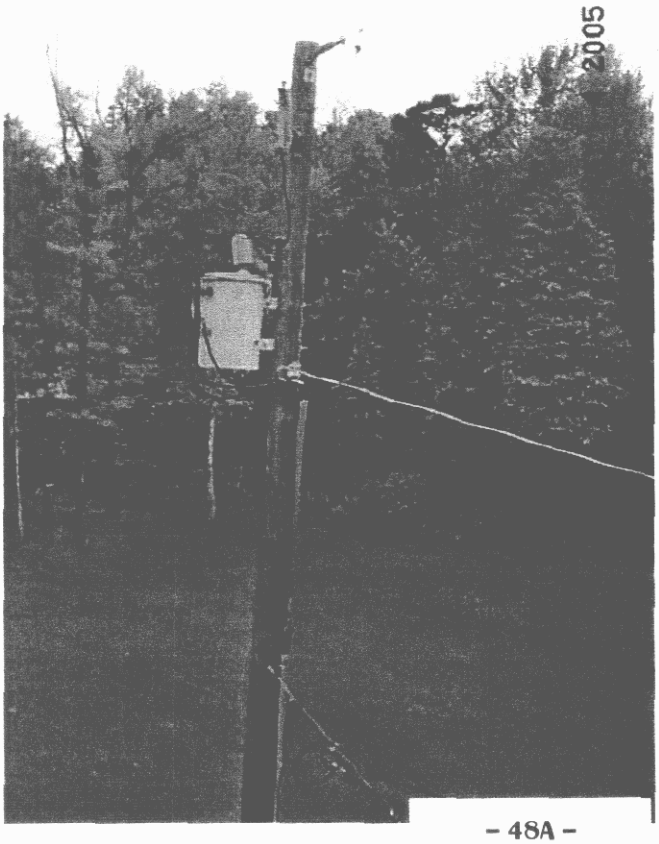
subsequently overruled by USS. Indeed, it would not surprise me at all if the reason that EAI has not provided operators with the complete set of its own standards is because it would be readily apparent that they would be in violation of those standards on essentially a system-wide basis.

71. As indicated previously, I am very familiar with these kinds of engineering guidelines. But after nearly two years and innumerable visits to the field in Arkansas, there is no question that the condition of Entergy's own aerial plant shows the need for serious system-wide training and correction. The EAI joint-use specifications that I have seen are generally well-defined, and except where I have noted otherwise, reasonable for new Entergy pole installations. If Entergy were to follow those specifications when it installs its facilities, then we would have many fewer problems in Arkansas. But this is a big "if." The following medley of photos and descriptions makes this point very strongly.



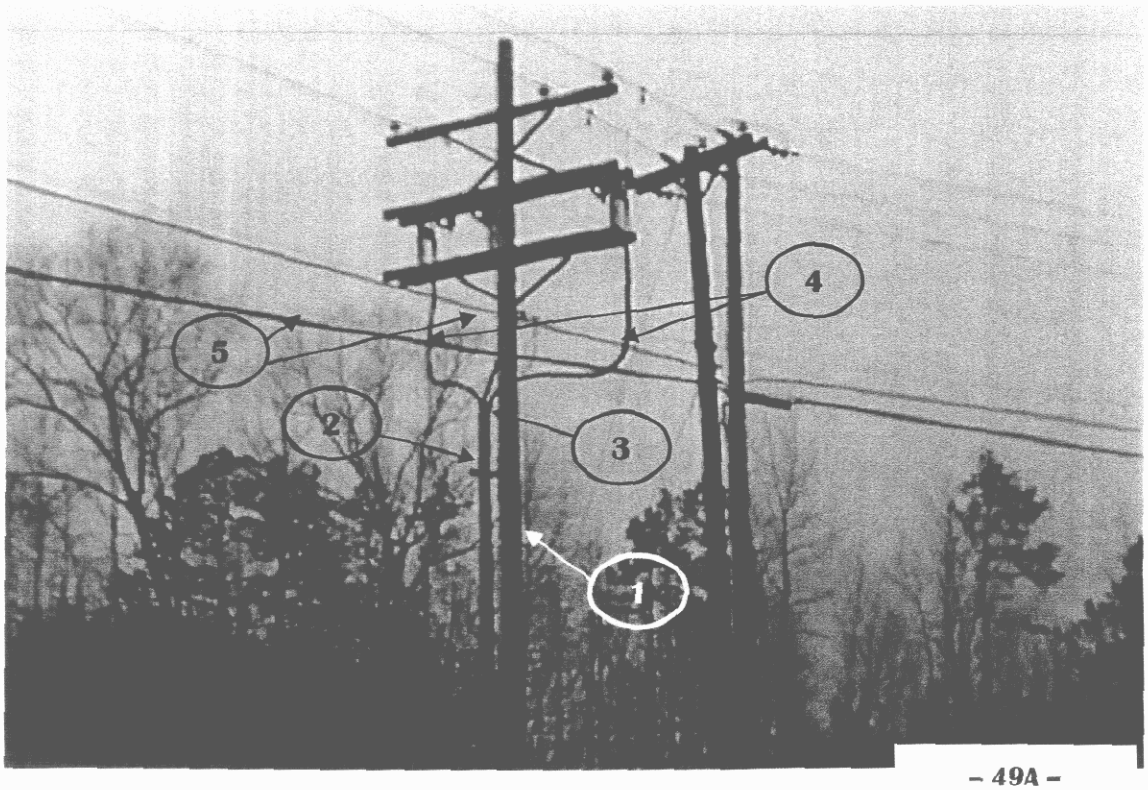
–47A –

This is a pole that Cox asked Entergy to replace for its upgrade in Malvern. It is a brand new pole, so EAI was starting with a clean slate. The first problem is that EAI has installed the riser conduits poorly (Arrow #1). The black cables visible in the photos are hot electric cables leading from a transformer at the top of the pole to an underground electric service installation (Arrow #2). The top of the conduit (Arrow #3) is about two or three inches from Cox's cable TV facility (Arrow #4). The dangling wire visible about a foot to the left of the pole (Arrow #5) is one of Cox's customer service drops that Entergy did not re-connect after it replaced the pole and took the liberty to transfer Cox facilities. Another major problem is that this is a dead-end pole, that EAI did not guy. All dead-end poles must have guys to balance load tension.



- 48A -

As is clear from this photo of the same pole depicted in the previous photo there is no guy and the pole is already leaning. This situation will get worse over time. Lines will sag, possibly creating hazards with traffic beneath the span. The pole could eventually fall down.

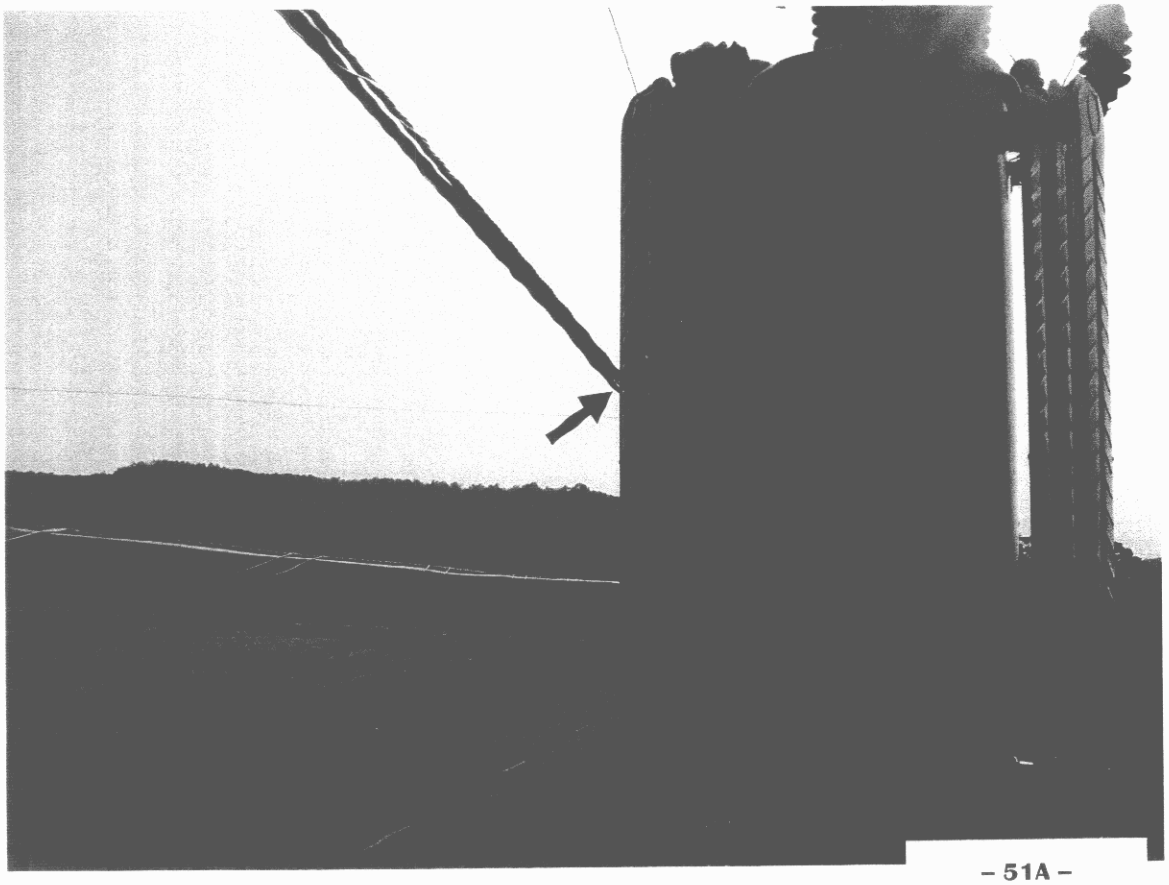


– 49A –

This new pole (Arrow #1) and high voltage primary cable riser (Arrow #2) was installed by EAI. The riser pipe (Arrow #3) stopped below cable (Arrow #4), not 40 inches above as EAI insists is their mandatory standard. The electric cable then flared out from the riser, completely surrounding the cable TV facility (Arrow #4). Comcast ultimately was able to extricate its facilities, but only by cutting them down – a very expensive and wasteful operation that could have been avoided if EAI had sought to notify attachers of this new installation and coordinate the project. This photo was taken at the direction of Marc Billingsley of Comcast.

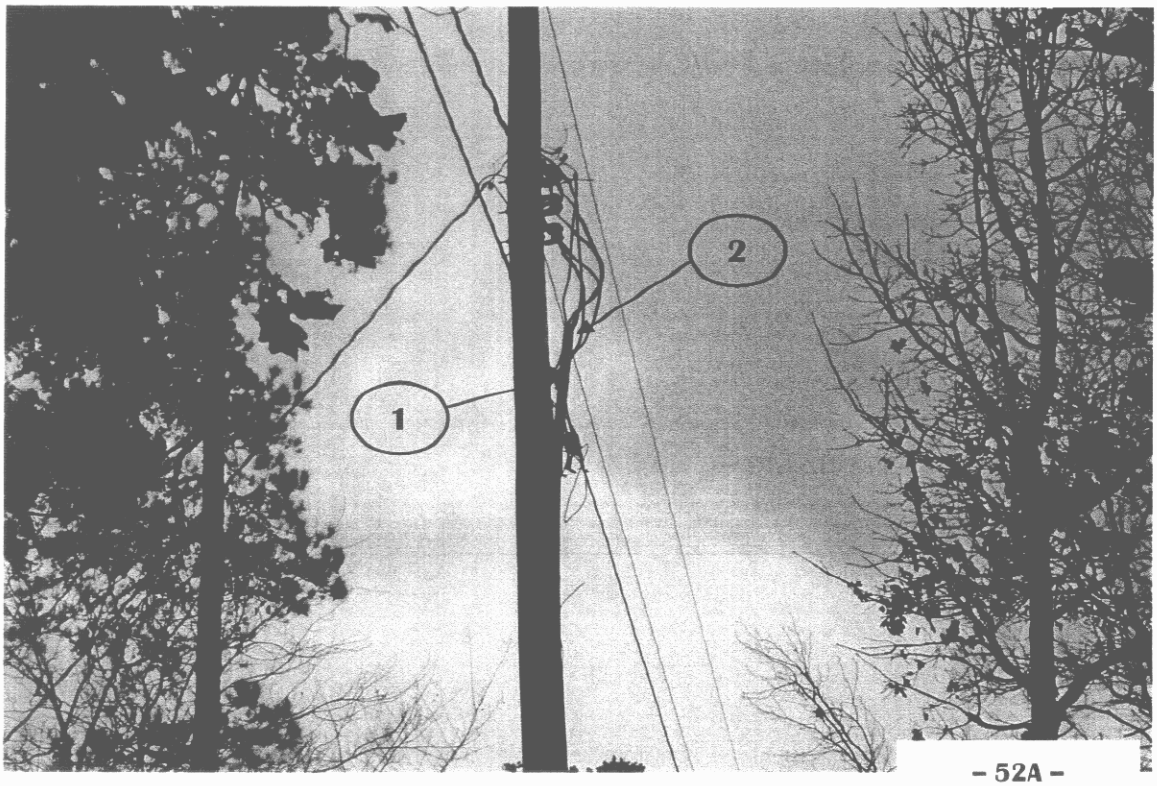
– 50A –

These photographs were taken at the direction of Jeff Gould of Cox in that company's Russelville system. Here, the power company very recently has (1) installed new poles; (2) put up three step voltage regulators, and (3) put the regulator tanks into direct contact with the pre-existing communications lines. The communications cable near the top of the long regulator tanks is much less than 40 inches to the exposed high-voltage wires and connections on top of the regulator tanks and within easy reach of workers and sudden death. In addition, the neutral that according to EAI must in all cases be 40 inches *above* communications, EAI actually installed several feet *below* communications. But the communications lines are not connected to these poles and are merely rubbing against these regulator tanks. This is obvious from the next photo.

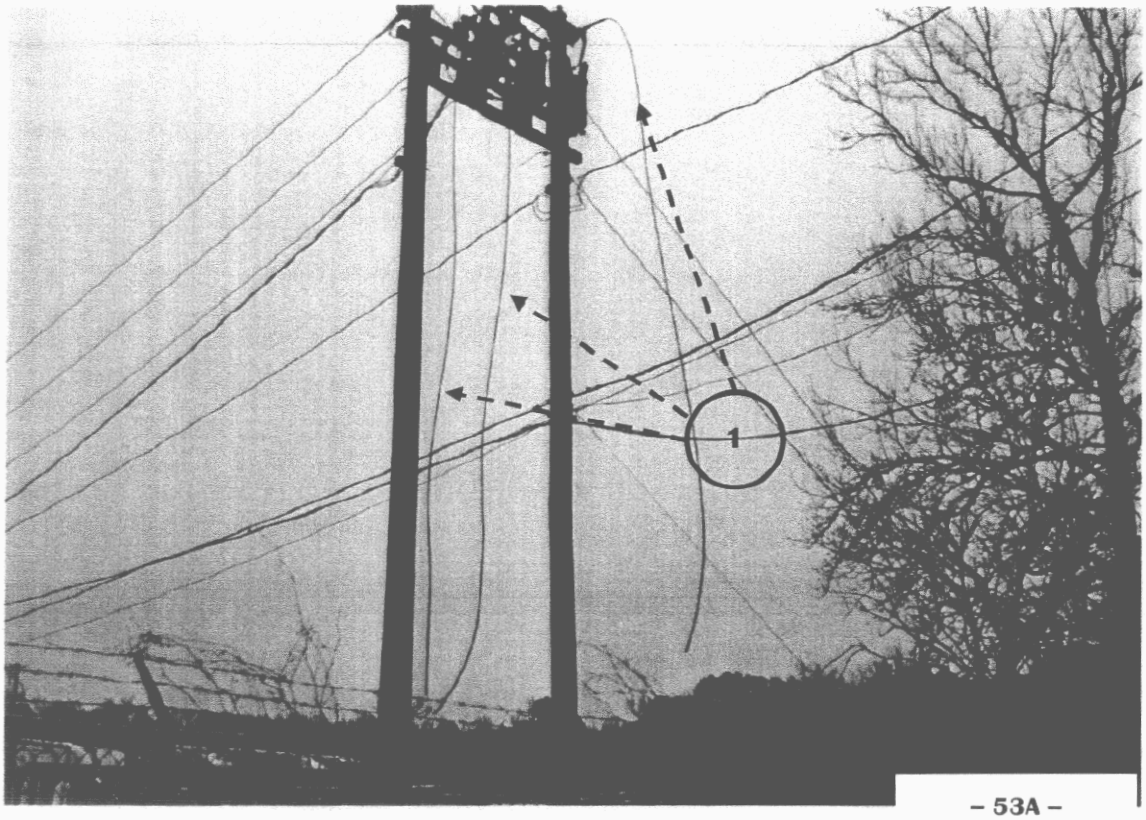


– 51A –

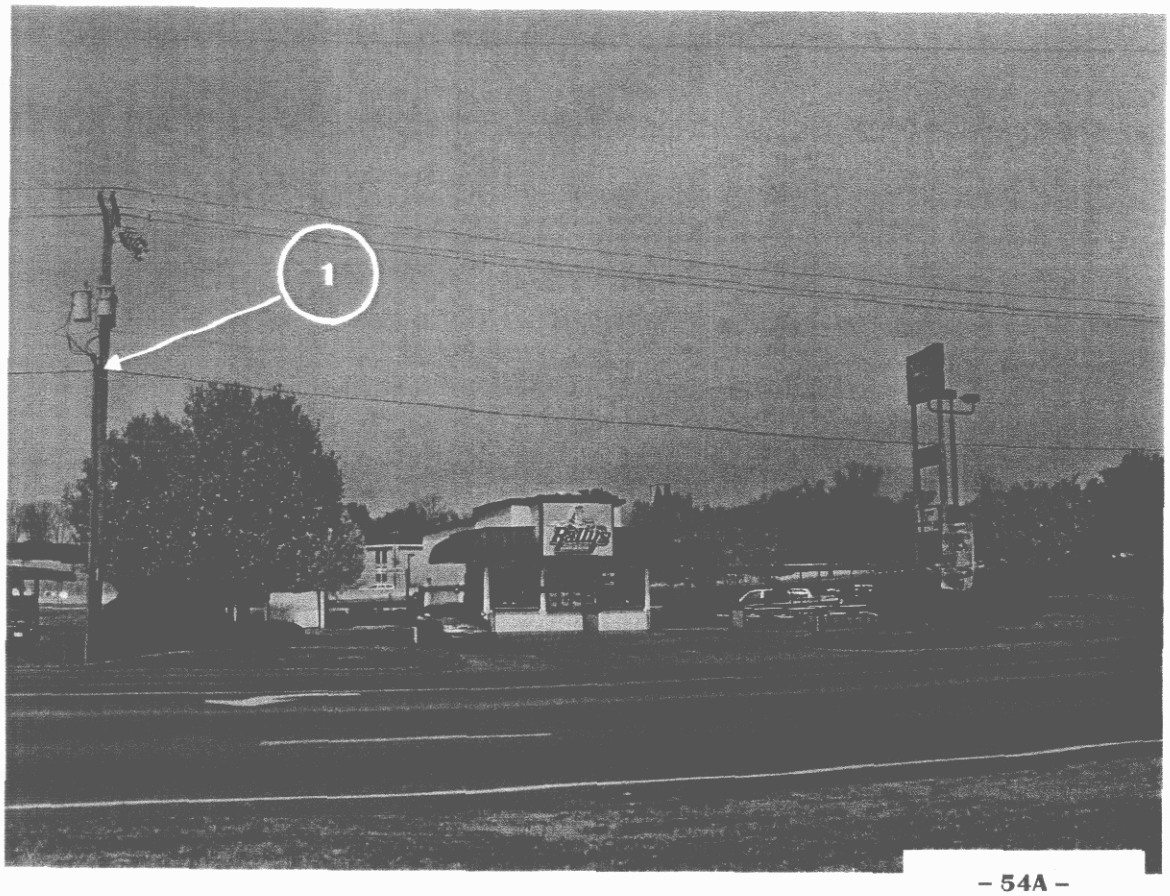
This photo was taken at the direction of Cox's Jeff Gould.



This photo depicts a typical EAI configuration in Arkansas. Not only has the power company installed the electric riser and conduit literally on top of the cable television facilities (Arrow #1), but the riser is too short (Arrow #2), creating multiple violations of the electric-to-communications clearance standards of the NESC. Note also the "fly-away" appearance of the riser conduit. These electric cables above the riser pipes, which pin cable television poles and preventing CATV workers from accessing facilities without touching power, should be corrected immediately by EAI. This photo was taken at the direction of Marc Billingsley of Comcast.

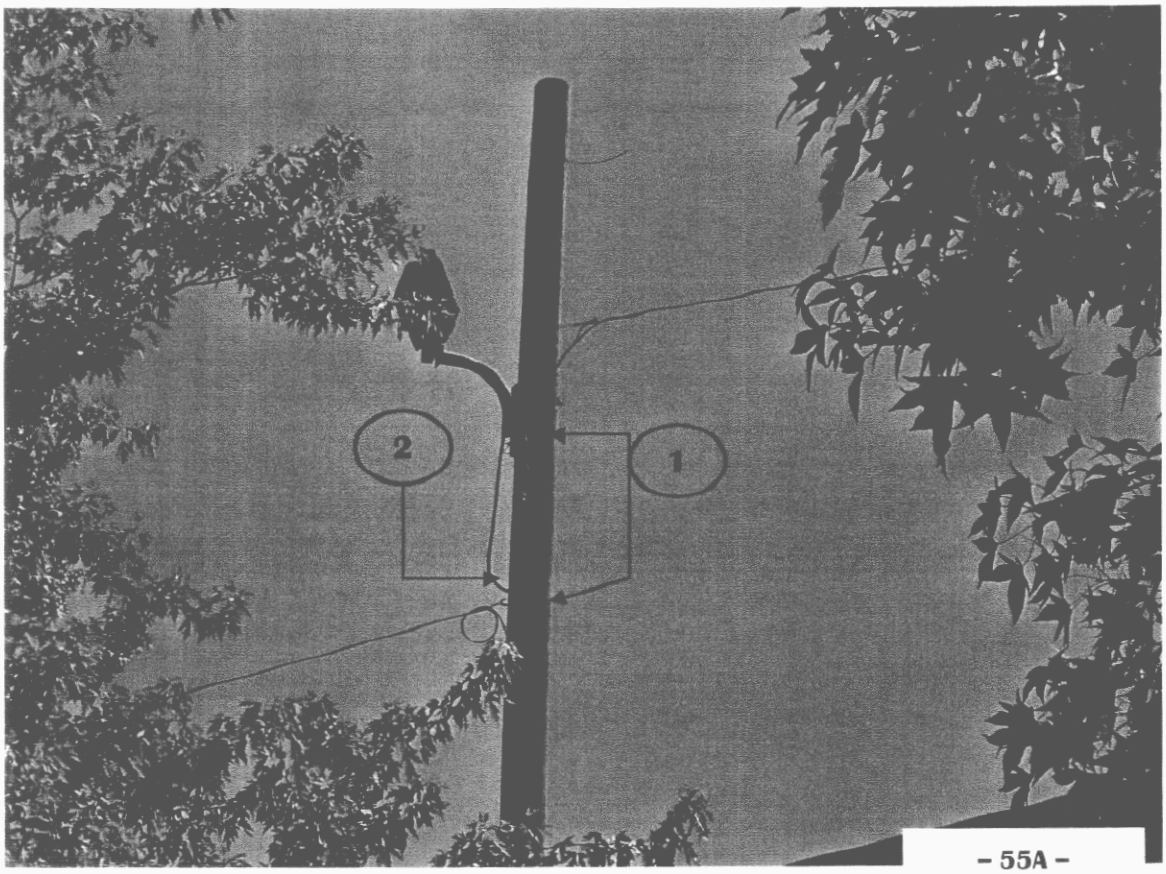


This photograph which was taken at the direction of Marc Billingsley of Comcast, shows dead primary lines hanging down (Arrow #1) from the top of high-voltage power distribution poles near an abandoned bicycle factory at 6301 Patterson Road in Little Rock. The power lines, even though apparently de-activated, create a dangerous situation because they touch the cable television support strand and they hang down low to the ground. The work rules of the NESC apply to electric workers and communications workers. They do not permit workers to treat such lines as dead unless they are disconnected from the source, tested for absence of voltage and grounded. Further, NESC rule 214.B.3. states that lines permanently abandoned shall be removed or maintained in a safe condition. These abandoned lines create serious hazards for workers and the public.

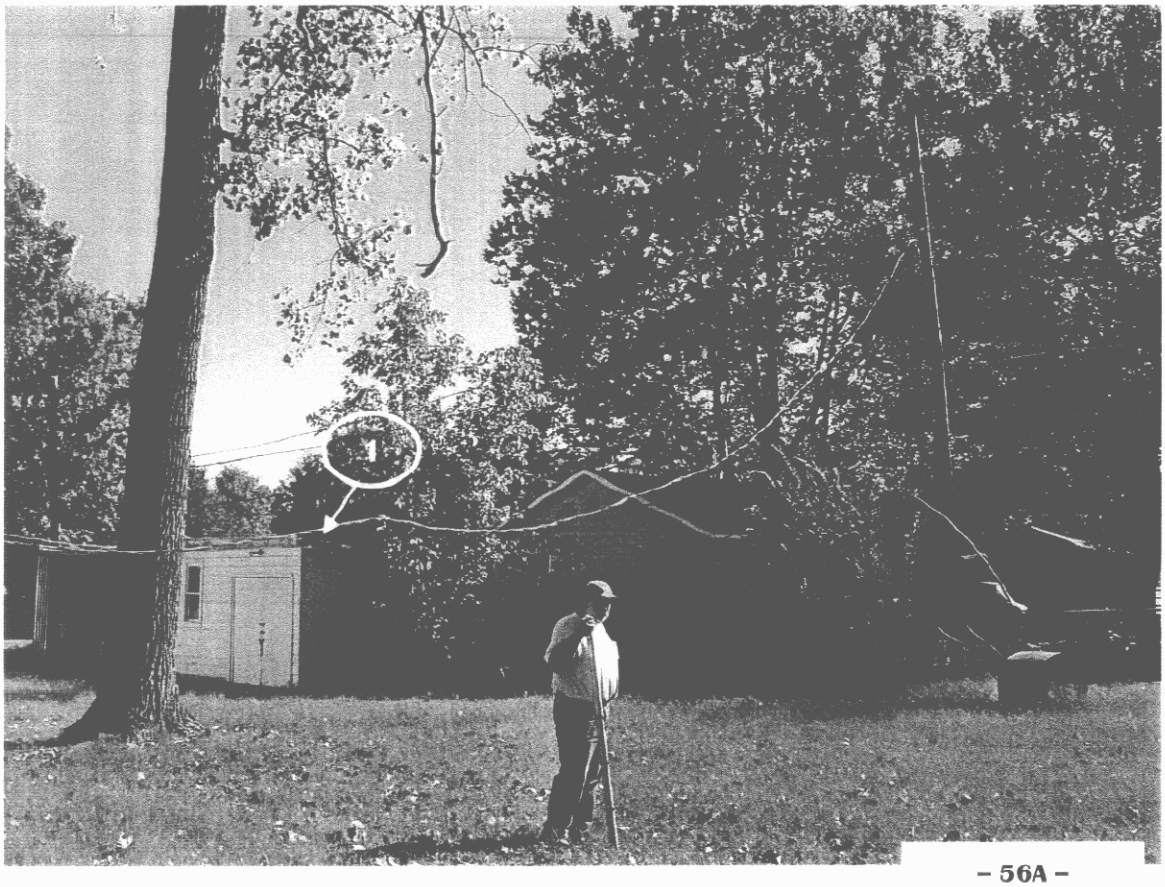


– 54A –

This photo, which I took, shows a pole at the left where there is a new underground electric service riser, with the riser pipe stopped about 4 inches above the cable television facilities (Arrow #3). EAI could have easily installed this service riser to a place above the neutral wire, which would meet the NESC 40" requirement. I was present during a make ready field meeting held on March 24, 2005 to accommodate a project for another communications company in the area needing access to EAI poles. At that meeting EAI and USS told Comcast that they would not extend this riser and would not accept responsibility for fixing the violation that it created. Location: Jacksonville, AR, N. First ST.

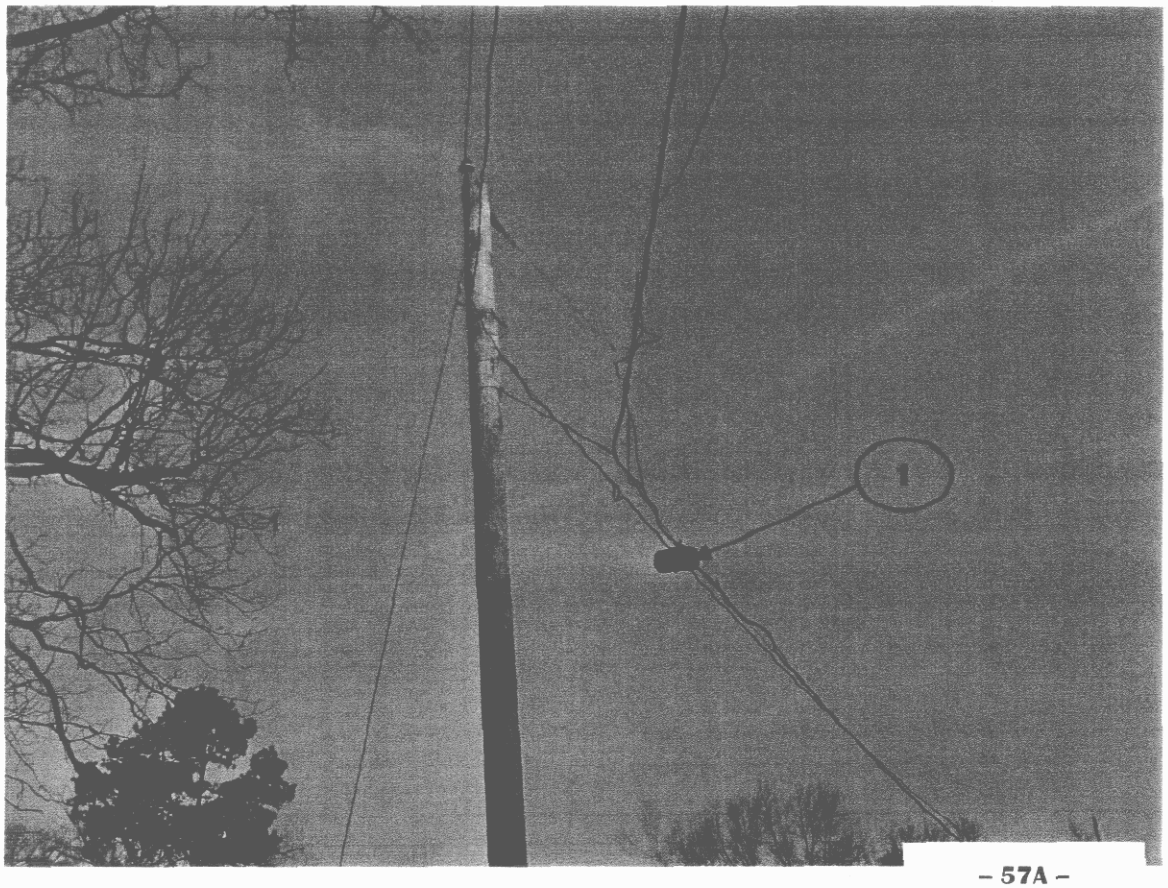


This new street light illuminates the parking lot at the Comcast building in Little Rock. There is ample separation between the light bracket and the communications drop (Arrow #1) but EAI has built this new light with excessively long power leads (Arrow #2), hanging down closer than 12 inches above communications. Location: Little Rock, Enmar Dr.



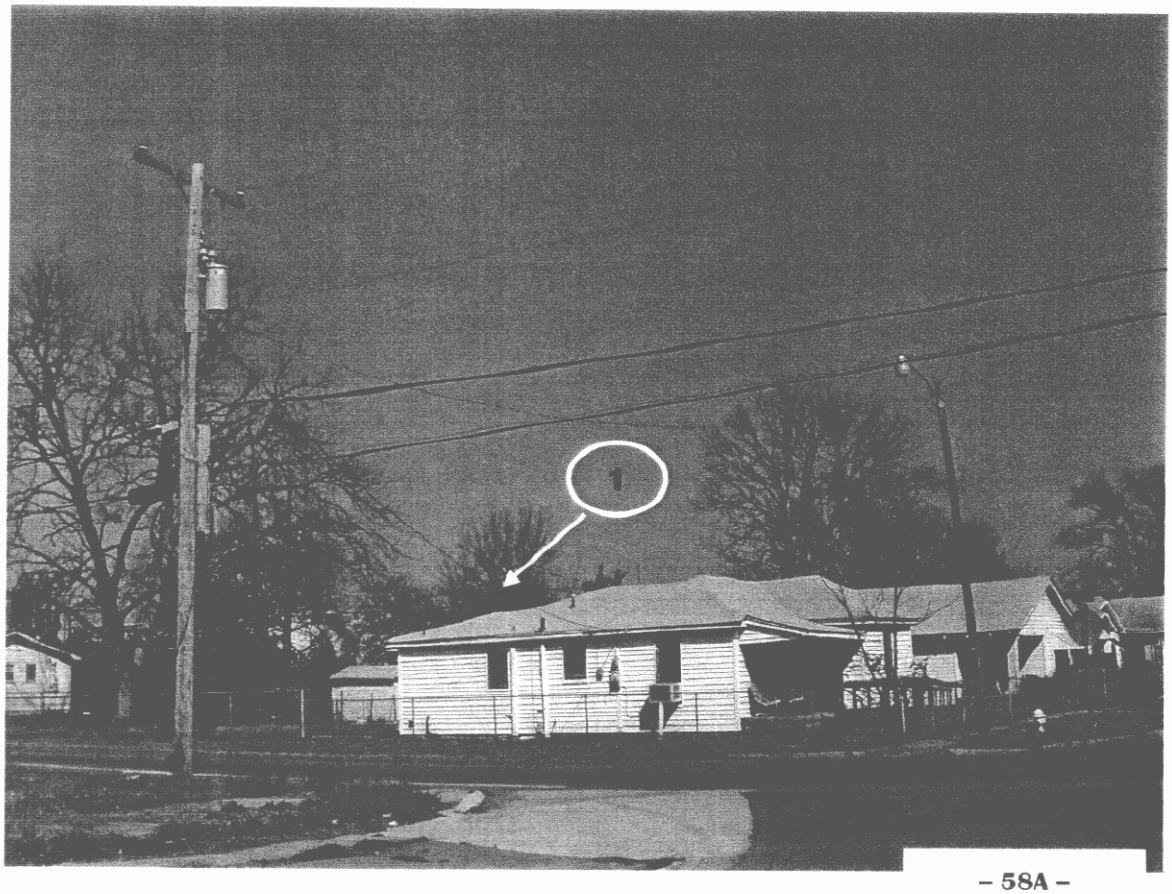
– 56A –

The power lines in this photo, which I took, are along back lot lines between houses. This power drop (triplex cable, 240/120 volts (Arrow #1)) has pulled loose from the house and is being held up by a Comcast drop wire to the same house. Good communications, cooperation and fairness help keep these types of problems from getting out of control. Location: Jacksonville, AR.



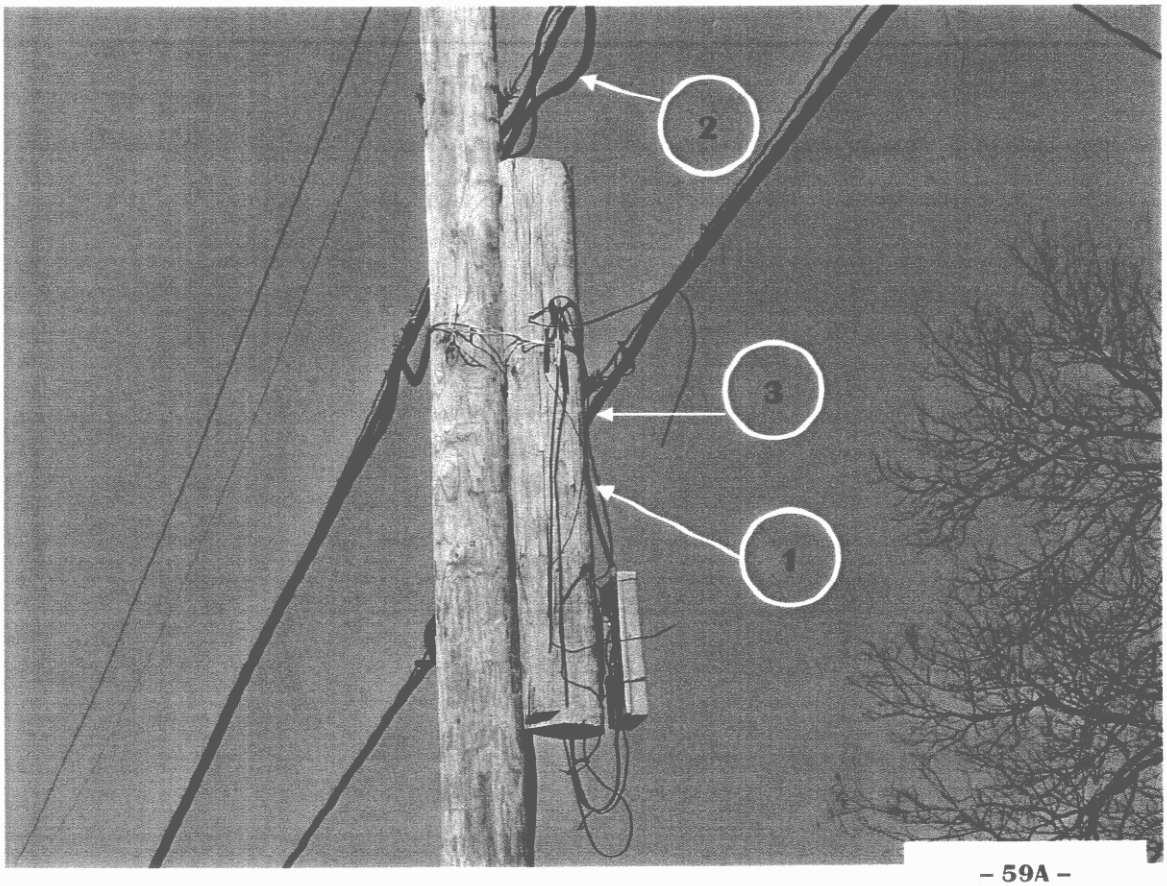
– 57A –

This photo, which I took, shows another EAI pole that apparently was broken by a vehicle. EAI tied Comcast's cable, plus a big chunk of the pole that it had sawed off from the old pole with a piece of scrap wire (Arrow #1). Comcast discovered this during a make-ready ride-out to assist another party in gaining access to Entergy poles in March 2005. This is a good example, and there are countless other ones, where EAI simply did not inform cable that it had performed work on the cable tv facilities. This continues to be a big problem. Location: Jacksonville Hwy 67/267.



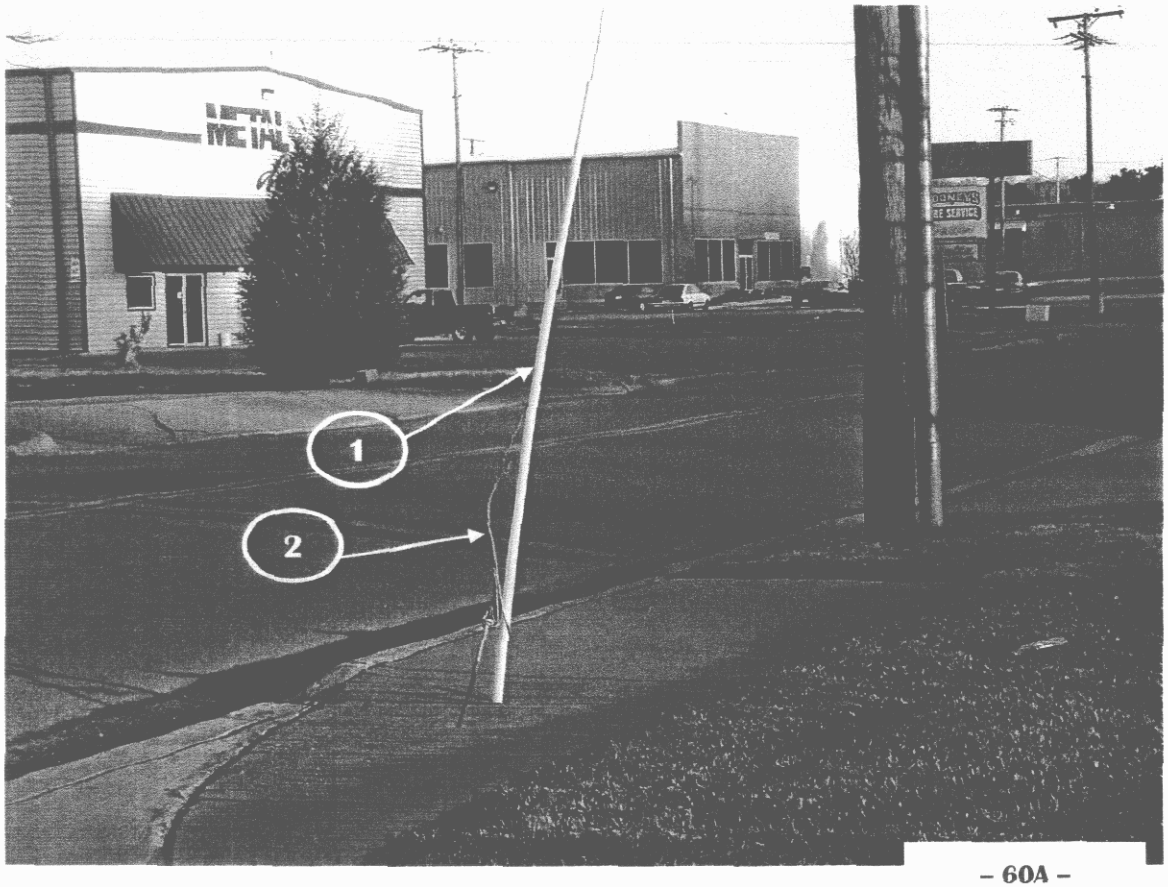
– 58A –

This photo, which I took, shows a very low electric service that is only 12 feet above the street (Arrow #1). NESC Rule 232 Table 232-1 requires it to be 16 feet. Unless it is raised, eventually a tall vehicle will pull this hot electric wire down. Location: Little Rock E. 11th St and J.L. Hawkins St.



– 59A –

This pole, which is the same one as the prior photo shows a 5-foot length of the old broken pole, wired to the new pole by EAI (Arrow #1). You can see that the cable company has transferred its facility (Arrow #2) from the old pole to the new pole, but that the telephone company (Arrow #3) has not. Comcast notified EAI of this hazard, which EAI most likely created in conducting an emergency repair to the pole after a vehicle collision. Location: Little Rock E. 11th St and J.L. Hawkins St.



– 60A –

This photo, which I took, shows where EAI placed a new bright yellow guy marker (Arrow #1) on its steel down guy, but ignored the much more serious issue of the slack down guy that was providing no stability or support to the pole. In fact the guy was so slack the guy marker could not stay on properly (Arrow #2). The next pole in the span also contained a slack guy, which caused the two poles to bend in toward one another creating unacceptable slack in the span. Location: Little Rock, Enmar Dr.

72. This small sampling of violations that Entergy has created point up major deficiencies in EAI's standards and processes. First, they do not adequately address situations where EAI does not comply with its own standards on its poles which otherwise would have adequate space. Second, EAI does not recognize the legitimate compliance margin built into the NESC itself for any new or existing pole which complies with the NESC.

73. For example, EAI and other power companies have drawings and dimensions (measurements) for such things as setting depth for poles, required distances for wires and neutrals from the top of poles; spacing between wires; fused switches and transformers, etc. For its part, EAI designates 8 feet of the top of 40 foot poles as electric company space. The next 3 feet 4 inches (40 inches) to the top communications attachment, is the communications safety zone. A 40-foot pole needs a ground-set depth of six feet. Thus, if EAI sets a 40 foot pole 7 feet deep and actually places a secondary riser pipe 9 feet below the top of the pole, two feet of designed usable space has been wasted. EAI should accept responsibility for such deviations from its own standards, pay for remedial action where required and retrain its designers and construction crews to avoid such waste. EAI should certainly stop trying to make cable operators pay for it.

74. The net result of EAI's non-compliance with its own standards, the NESC or even good common-sense field practice is that EAI has wasted incalculable amounts of pole space in Arkansas, created innumerable unsafe field conditions and then blamed its wide-spread compliance failures on cable operators.

75. The bottom line is that if EAI would characterize its own joint use standards as being preferred, and acknowledge that NESC compliance is an appropriate "alternate" standard where its own internal guidelines cannot

reasonably be met, then the standards for joint use could be quickly resolved. The NESC and the NESC Handbook both provide support for this approach.

76. Finally, there are violations on the poles that cable operators are responsible for. Cable operators have gone about correcting those violations. However, as indicated earlier, many of these violations are not safety hazards and do not pose any threat to the public, to line works, the electric grid or electric system reliability. These kinds of violations should be recorded and corrected in the course of system maintenance and routine construction and system improvement. Serious violations that do pose a risk to safety and services integrity should be corrected promptly.

False Premise No. 5: It Is Not Possible To Categorize Pole Attachment Clearance And Safety Issues And That Each Pole Must Be Resolved On A Case-By-Case Basis.

77. One of the biggest stumbling blocks throughout this process has been Entergy's refusal to accept long-standing and reasonable application of a variety of NESC standards, including the NESC's grandfathering provisions.

78. EAI has stated that it will not accept a cable television facility as being compliant with NESC paragraph 13B (grandfathering) unless the cable operator secures a P.E. certification for each individual facility on each pole affected. What EAI in effect has done is state that each pole is unique and that design and corrections cannot be standardized. This, of course, is absurd. Complainants have identified this as EAI's False Premise No. 5.

79. To adopt Entergy's view and require a P.E. to examine each pole would be much like requiring a medical doctor to apply all band-aids. Reasonable procedures for a P.E. to be responsible for, in charge of, and, to sign off on a compliance certification could be negotiated. In fact, Comcast suggested to EAI at the May 26, 2004 meeting that Comcast could provide P.E. certification to EAI of compliance with the then almost agreed-upon guidelines. This type of P.E. certification would have covered violations corrected or grandfathered on a circuit basis and was offered by the cable side in lieu of a post inspection by USS. EAI stated that it would evaluate the proposal, but that it wanted USS to do post inspections initially and possibly accept category certification as "trust developed."

80. There is no question that an NESC expert could, and perhaps should, be involved in developing detailed field procedures and other materials reasonably required to determine that a cable facility (drop wire, J-hook, tap, power supply, cable line, etc.) is NESC compliant under NESC Paragraph 13B (Grandfathering). A well-designed and conducted NESC audit procedure would address categories of facilities and detail any specific data that must be gathered on each individual facility. The development of procedures would absolutely be done by categories such as drop wires to houses, mid-span clearances, etc.

81. The involvement of NESC experts (who may be P.E.) working for communications companies and pole owners could be a very useful part of

improving NESC and EAI standards compliance. The resulting inspection and audit procedures should be applied to all attachers.

82. Again, the corrections required by the P.E. should be the basis for retraining engineers, construction crews and joint use administrators. But the starting point is establishing reasonable guidelines, based on EAI standards and the NESC - which at its foundation is a practical and flexible "living, breathing" source of guidance. Its grandfathering provisions are critical to the Code and critical to allowing communications companies and pole owners to work through complex issues.

83. Specifically with respect to grandfathering, EAI has insisted that it will only accept grandfathering with P.E. certification on ***past violations***. If reasonable engineering guidelines cannot be applied to past, present, and future attachments, the record keeping for which poles, among thousands, the negotiated standards apply, and which poles EAI standards apply, as well as when a pole moves from the prior category to the latter, will be impossible. Trust and cooperation will never be restored and ultimately better safer electric plant will not be achieved.

False Premise No. 6: The Permitting Freeze Is Not A Permitting Freeze.

84. I read with interest EAI's assertion that it has not imposed a permitting freeze on the cable operators in this case. EAI's approach has been quite simple. For Alliance and Comcast, the two operators that have been subject to the full USS safety audit, EAI refused to allow them to access

additional EAI poles within a circuit until (1) payment was made on the USS invoices (2) all safety violations on the circuit are corrected.

85. I understand the operators are reluctant to pay the entirety of the USS fees because they believe that the work was not done well and that the allocation was not fair. This is detailed elsewhere.

86. With respect to correcting the violations, the greatest barriers to that ever occurring are: (1) the lack of reasoned standards; (2) coordination among the parties; (3) the condition of Entergy's own plant; and (4) EAI's continuous creation of new violations. As long as this is the environment, EAI's 100% compliance standard will never be met.

87. Contrast this approach with the one that EAI has taken with respect to another (non-complainant) cable company. As detailed in Marc Billingsley's reply declaration, one cable operator that is not participating in this complaint had an urgent need to install fiber optics on more than 160 Entergy poles in Jacksonville, Arkansas. While there are a number of NESC clearance issues on these poles before this operator attached, and there are even more that were created by the installation of the additional communications facilities, these can—and I understand will—be remedied.

88. In contrast to Entergy's stance toward the Complainants here that no new cable plant could be installed until all violations were cleared on the poles, and all make-ready work completed, EAI allowed this operator to build through the violations and correct them later. It is permissible to do

this because the work rules found at Section 4 of the NESC allow work to proceed on poles where there are NESC violations. These work rules for communications workers must be followed. This is the approach that—notwithstanding other aspects of the dispute—EAI should follow with new builds that Complainants will require. While I understand that EAI in some sense has "discriminated" against Complainants (perhaps because this company hired USS), my view is that this episode shows that Entergy knows how to accommodate joint-use requests expeditiously. This includes the critical elements of communicating and coordinating with the affected parties and being reasonable and flexible on certain clearance requirements.

Recommendations

89. For all the Complainants in this matter, however, the current situation is untenable. I have several suggestions that I believe will solve a number of these problems and get things back on track.

90. First, engineering guidelines should be developed that recognize EAI's responsibility and right to develop its own specifications manual. These specifications should include rules for joint use which state EAI's preferences, but that acknowledge that NESC compliance is acceptable where pole and location constraints prevent achieving EAI's preference. No distribution specifications manual, and I have seen many, contains all combinations of electric facilities which are constructed on poles in the field. For example lights are added to many existing poles with a wide variety of

combinations of electric and communications facilities already in place. Manuals typically show one or two drawings with dimensions of lights mounted on exemplar poles. Utilities rely on adequate training, experience and inspection to combine facilities from multiple drawings on a given pole. This training must be based on understanding and application of the NESC.

91. Second, clear joint use procedures should be developed that allow each company to accomplish their work safely, timely and economically. The procedures must hold all parties accountable for compliance including EAI.

92. Third, the pole owners and *all* attaching parties (including EAI, telephone, municipal and state attachers, etc.) should be thoroughly trained in the applicable NESC and Energy standards.

93. Fourth the negotiation and execution of a new pole attachment agreement that could include EAI preferred standards and reflects NESC principles, existing legal precedent and field-developed best practices, particularly in the area of inspections and plant clean-up.

94. If the concepts such as those that I have outline in paragraphs 90-93 are implemented, then I believe that the relationships and operations that are in a shambles today can be restored. Despite all these problems EAI has shown the capacity to act reasonably and expedite access to some parties, if not Complainants. This at least shows that there is hope.

RECEIVED - FCC

JUN 10 2005

Federal Communication Commission
Bureau / Office

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of ARKANSAS CABLE TELECOMMUNICATIONS ASSOCIATION; COMCAST OF ARKANSAS, INC.; BUFORD COMMUNICATIONS I, L.P. d/b/a ALLIANCE COMMUNICATIONS NETWORK; WEHCO VIDEO, INC.; and TCA CABLE PARTNERS d/b/a COX COMMUNICATIONS, *Complainants* v. ENTERGY ARKANSAS, INC. *Respondent.*	File No. _____

RECEIVED

JUN 13 2005

Chief, MDRD
Enforcement Bureau

Reply Declaration of Michael T. Harrelson, P.E.

I, Michael T. Harrelson assert under the penalties of perjury of the law of the United States that the foregoing Reply Declaration is true and correct.

Michael T. Harrelson, P.E.